Yasuji MORIMOTO*: Notes on rust flora in Japan (6)**

森本泰二*: 日本産銹菌雑記(6)

35. Puccinia caricis-lanceolatae Y. Morimoto sp. nov.

Soris uredosporiferis amphigenis, plerumque epiphyllis, minutis 0.2-0.5 mm longis, epidermide diu tectis, flavo-brunneis; uredosporis ellipsoideis vel obovatis, echinulatis, flavo-brunneis, $17-24~(-25)~\times~14-17~(-19)~\mu$; poris germinationis 2, 3 vel 4 aequatorialibus instructis; episporio $1.5-1.7~\mu$ crasso. Soris teleutosporiferis amphigenis, sparsis, linearibus, 0.5-1 mm longis, mox nudis, compactis, pulvinatis, atris; teleutosporis clavatis, apice rotundatis, truncatis vel obtusis, incrassatis $(3.5-8.5\mu)$, medio constrictis, basi attenuatis, levibus, brunneis, $36-51(-60)\times8.5-13(-17)~\mu$; pedicello persistenti, flavo-brunneo, asque $23-34~\mu$ longo; mesosporis immixtis.

Hab. II, III. On Carex lanceolata Boott (Hikage-suge). Hisuwa, Yoshidacho, Pref. Hiroshima (May 28, 1960, Type! in Herb. Agr. Yamaguchi Univ.; Jun. 7, 1961); Akadao, Yoshida-cho, Pref. Hiroshima (Jun. 4, 1960); Mitadani, Koda-cho Pref. Hiroshima (Nov. 24, 1960; Apr. 23, 1961); Takanosuyama, Shiraki-cho, Pref. Hiroshima (Jun. 5, 1960); Hakone, Pref. Kanagawa (July 27, 1960).

This speceis resembles *Pucc. caricis-brunneae* having small teleutospores, but the pores of uredospore are 2, 3 or 4 equatorial.

36. Puccinia caricis-heterolepis Y. Morimoto sp. nov.

Soris uedosporiferis hypophyllis, sparsis vel aggregatis, minutis, rotundatis vel ellipsoideis, $0.1\text{-}0.5\,\mathrm{mm}$ longis, mox nudis, subpulverulentis, brunneis; uredosporis globosis vel subglobosis, echinulatis, $17\text{-}20\times11\text{-}18\,\mu$; episporio $2\text{-}3\,\mu$ crasso; poris germinationis 2, 3, 4 aequatorialibus vel 3 sparsis instructis. Teleutosporiferis epiphyllis vel hypophyllis, rotundatis vel ellipsoideis, $0.5\text{-}1\,\mathrm{mm}$ longis, mox nudis, compactis, pulvinatis, atro-brunneis vel atris; teleutosporis ellipsoideis vel oblongis, apice rotundatis, truncatis vel obtusis, incrassatis $(5\text{-}12\,\mu)$, medio vix constrictis, $(31\text{-})40\text{-}69(\text{-}77)\times10\text{-}20.5\,\mu$, basi leniter attenuatis, levibus, castaneo-brunneis; pedicello per-

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^{**} Continued from Journ. Jap. Bot. 44(4): 112 (1969).

sistenti, brunneo, $30-50 \mu$ longo; mesosporis immixtis.

Hab. II, III. On *Carex heterolepis* Bunge (Yamaaze-suge). Kamiirie, Yoshida-cho, Pref. Hiroshima (Aug. 15, 1959, Type! in Herb. Fac. Yamaguchi Univ.); Mikoto-mura, Hiba-gun, Pref. Hiroshima (Oct. 4, 1959).

37. Puccinia caricis-kouriyamensis Y. Morimoto sp. nov.

Soris hypophyllis, sparsis, linearibus $(1-)3-10\,\mathrm{mm}$ longis, nudis, fragmentis epidermidis circumdatis, pulvinatis, compactis, flavo-brunneis; amphisporis globosis, subglobosis vel obovatis, fere levibus, flavo-brunneis, 18-27 \times 14.5-25(-27) μ ; episporio 2-3 μ crasso; poris germinationis 3 aequatorialibus instructis. Soris teleutosporiferis conformibus, compactis, pulvinatis, castaneo-brunneis; teleutosporis ellipsoideis vel oblongis, apice rotundatis vel conico-attenuatis, incrassatis $(5-9\,\mu)$, medio vix constrictis, basi attenuatis vel rotundatis, levibus, castaneo-brunneis, $34-60(-68)\times14-20(-23)\,\mu$; poris germinationis cellulae supperioris ad apicem, inferioris sub septo posito; pedicello persistenti, hyalino, usque $100\,\mu$ longo; mesosporis immixtis.

Hab. II, III. On *Carex brunnea* Thunb. (Kogome-suge). Koriyama, Yoshida-cho, Pref. Hiroshima (Jan. 8, 1960, Type! in Herb. Fac. Yamaguchi Univ.; Mar. 6, 1960); Itsukushima, Pref. Hiroshima (Apr. 23, 1960).

38. Puccina breviculmis Dietel in Ann. Myc. 5: 72, 1907.

Amphispores, $20-34\times19-24~\mu$, pores 2 or 3 equatorial, wall brownish, 2-2.5 μ thickness. Teleuto. $26-42\times12-17(-29)~\mu$, ap. $3.5-7~\mu$, ped. up to $51~\mu$.

Hab. II, III. On Carex leucochlora Bunge (Aosuge). Yokoyama, Iwakuni City, Pref. Yamaguchi (Apr. 22, 1948; Apr. 20, 1961).

39. Puccinia moiwensis Miura ex Sydow in Ann. Myc. 11: 105, 1913.

Hab. II, III. On Carex sachalinensis Fr. Schum. var. alterniflora Ohwi (Ooito-suge). Itsukushima, Pref. Hiroshima (Apr. 23, 1960).

35. ヒカゲスゲを寄主とし小さな冬胞子を持っている。

- 36. ヤマアゼスゲを寄主とし、夏胞子は小さく発芽孔を赤道部に 2,3,4 個持つものと 3 個散在 (少量) したものと 2 種類の夏胞子を有す。
- 37. コゴメスゲを寄主とし、両性胞子は球形で3個の発芽孔を赤道部に有する。 冬胞子錐は1cm 或はそれ以上の褐色の細長い線状である。
- 38. アオスゲを寄主とし、夏胞子に発芽孔 2,3 個赤道部にある両性胞子を記録しておく。
- 39. オオイトスゲを寄主とする菌で柄は apex と同一色で黄褐色である。

ヤマアゼスゲ,コゴメスゲを検定して戴いた初島住彦博士,オオイトスゲを検定して戴いた大井次三郎博士に,またアオスゲ上の菌に対し有益なる suggestion を戴いた故 Ivar Jørstad 博士に対し深甚なる感謝の意を表す。